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Signed:

Leslie Hoffmann

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

HUANG, et al.

Serial No. 10/817,381

Filed: April 1, 2004

For: CAPACITIVE ULTRASONIC TRANSDUCERS
WITH ISOLATION POST

Examiner: To be assigned

Art Unite No. 3736

Confirmation No. **2603**

Date: August 6, 2004

PRELIMINARY AMENDMENT

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

Sir:

This Preliminary Amendment should be considered before examination of the referenced application.

IN THE SPECIFICATION

Please amend the paragraph beginning at page 2, line 3, of application as follows:

--The electric field between the electrodes can attract and trap charges 17 either on the surface of or in the [insulating] isolation layer 14. The charges stay in the trapping cites for a long period because there is no DC path to discharge them. The accumulated charge shifts the DC voltage between the two electrodes away from the applied voltage by a random value. This dramatically degrades the reliability and repeatability of device performance.--

Please amend the paragraph beginning at page 4, line 20, of application as follows:

--Referring now to Figure 4 which illustrates a single cell of a cMUT with a silicon membrane 36 the design and location of the posts 37 is described. The device includes two sets of posts. The location and height of the posts is determined by simulating the membrane deflection under electrostatic force. This is illustrated for the circular cell of Figure 4. It is